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ABSTRACT

This article summarizes the employment outlook in 225 occupations as projected by the Bureau of Labor Statistics. It provides thumbnail sketches of employment data for each of the occupations in the 1988-89 "Occupational Outlook Handbook," on which it is based. Each entry presents the occupation's title, 1986 employment numbers, the percent change projected in employment between 1986 and 2000, the numerical change projected in employment between 1986 and 2000, and a summary of the job prospects for the occupation. The occupations are grouped in the following 18 clusters: managerial and management-related occupations; engineers, surveyors, and architects; natural, computer, and mathematics scientists; lawyers, social scientists, social workers, and religious workers; teachers, librarians, and counselors; health diagnosing practitioners; health assessing and treating occupations; writers, artists, and entertainers; technician occupations; marketing and sales occupations; administrative support occupations, including clerical; service occupations; agriculture, forestry, fishing, and related occupations; mechanics, installers, and repairers; construction trades and extractive occupations; production occupations; transportation and materials-moving occupations; and handlers, equipment cleaners, helpers, and laborers. Some overall trends are also profiled in the article. (KC)

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The 1988–89 Job Outlook in Brief

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The 1988-89 Job Outlook in Brief

by Martha C. White

They're closing down the textile mill
Across the railroad tracks.
Foreman says these jobs are going, boys,
And they ain't coming back.
— *Bruce Springsteen*

The loss of factory jobs that Bruce Springsteen sings about in "Hometown" worries many people, who wonder if the closing of the mills means the end of their chances for a job. New projections from the Bureau of Labor Statistics indicate that, although some occupations will employ fewer workers in the future, most are growing. An expanding economy and increased demand for goods and services will create millions of jobs in almost every type of occupation between now and the year 2000. Growth will be especially strong for technicians, service workers, managers, sales workers, management-related workers, and professionals. On average, an occupation that has 100 workers today will have 119 in the year 2000.

The number and kinds of workers needed in different occupations depend on the interplay of demographic, economic, social, and technological factors. The Bureau of Labor Statistics analyzes changes in these factors in order to develop projections of future demand in hundreds of industries and occupations. This article, which is revised every 2 years when the projections are updated, summarizes the employment outlook in 225 occupations.

Martha C. White is an economist in the Office of Economic Growth and Employment Projections, BLS.

Information in the "Brief"

"The Job Outlook in Brief" provides thumbnail sketches of employment data for each of the occupations in the *1988-89 Occupational Outlook Handbook*, on which it is based. Each entry presents the occupation's title, 1986 employment, the percent change projected in employment between 1986 and 2000, the numerical change projected in employment between 1986 and 2000, and a summary of the job prospects for the occupation. The occupations are grouped in the following 18 clusters:

- Managerial and management-related occupations.
- Engineers, surveyors, and architects.
- Natural, computer, and mathematical scientists.
- Lawyers, social scientists, social workers, and religious workers.
- Teachers, librarians, and counselors.
- Health diagnosing practitioners.
- Health assessing and treating occupations.
- Writers, artists, and entertainers.
- Technician occupations.
- Marketing and sales occupations.
- Administrative support occupations, including clerical.
- Service occupations.
- Agriculture, forestry, fishing, and related occupations.
- Mechanics, installers, and repairers.
- Construction trades and extractive occupations.
- Production occupations.
- Transportation and materials-moving occupations.
- Handlers, equipment cleaners, helpers, and laborers.

(An index of individual occupations appears on page 45.)

Before turning to the occupations that interest you, look over the next few pages. They discuss factors that affect employment in an occupation such as the demand for goods and services describe the assumptions used in making the projections, and give an overview of the employment outlook for each of the 18 groups.

Why Employment Changes

The number of workers employed in any occupation depends in part on the demand for the goods or services provided by those workers. Over the last 10 years, for example, increased use of computers by businesses, schools, scientific organizations, and government agencies has contributed to large increases in the number of systems analysts, programmers, computer operators, and computer service technicians. Even if the demand for goods and services provided by a group of workers rises, however, employment may not increase or may increase more slowly than demand because of changes in the ways goods are produced and services are provided. In fact, some changes in technology and business practices cause employment to decline. For example, even though the volume of paperwork to be processed is expected to continue to increase rapidly, the employment of typists and word processors will fall; this reflects the growing use of word processing equipment that increases the productivity of these workers and permits other office workers to do more of their own typing.

Using information on the demand for goods and services, advances in technology, changes in business practices,

and the occupational composition of industries, economists at BLS have developed three projections of employment by occupation in the year 2000. Each projection was developed in the light of a series of assumptions about the future. By varying the assumptions about such factors as growth of the labor force, output, productivity, inflation, and unemployment, the Bureau developed three different views of the economy in the year 2000. Referred to as the moderate-, low-, and high-growth scenarios, each provides a different employment estimate for most occupations. All the data in the "Brief" come from the set of moderate-growth projections, which is characterized by steady economic growth through the year 2000.

Future employment growth is clouded by uncertainty. The different scenarios represent only three of many possible courses for the economy; different assumptions would lead to other projections. For this reason, the scenarios should not be viewed as the bounds of employment growth; rather, they illustrate what might happen under different conditions. For example, unforseen changes in technology or the balance of trade could radically alter future employment for individual occupations.

More information about the assumptions underlying the projections and the methods used to develop the projections—along with some of the actual projections—is presented in "An Overview of the Year 2000," the first article in this issue. The fall 1987 issue of the *Occupational Outlook Quarterly* contains numerous charts that illustrate these projections; a series of articles in the September 1987 issue of the *Monthly Labor Review* presents detailed projections for the labor force, GNP, industries, and occupations.

Employment Through the Year 2000

Between 1986 and 2000, over 21 million new jobs will be added to the economy. Employment will rise from 111 million to 133 million; this represents an average growth for all occupations of 19 percent. This section looks at the 18 groups of occupations and gives an overview of projected employment change through the year 2000. Bear in mind that a particular occupation may not follow the trend projected for the group in which it is found. Therefore, you should refer to the long table on pages 17 to 44 for the outlook in a specific occupation.

Throughout this article, growth rates and opportunities are compared to the average for all occupations; the box, "Key Words in the Brief," explains the phrases used. In addition, the descriptions of employment prospects frequently refer to the amount of competition jobseekers are likely to encounter. Assessing the degree of competition is difficult. For occupations with lengthy training and strict entry requirements, it can be done with some accuracy. However, most occupations have several methods of entry and flexible requirements. In such cases, the potential supply of workers cannot be precisely measured, and it is not meaningful to talk about shortages and surpluses.

One final factor to remember when checking the outlook for an occupation is that growth in employment is only one source of job openings. In fact, most openings arise because of the need to replace workers who leave the occupation. As a result, even occupations with slower than average growth may offer many jobs for new workers.

Managerial and management-related occupations. Workers in managerial occupations establish policies, make plans, determine staffing needs, and direct the activities of businesses, government agencies, and other organizations. Workers in managment-related occupations provide technical support to managers.

The increasing complexity of business organizations and continuing expansion of the economy are expected to contribute to faster than average growth for these workers. Although these workers are employed throughout the economy, differences in industry expansion will produce varying rates of employment change for particular kinds of managers. For example, the growth of employment agencies and temporary help firms should result in much faster than average growth for employment interviewers. Managerial and management-related occupations should also experience faster than average growth in industries providing financial services, insurance, and health services. In contrast, those working in government and education are likely to face average or slower than average growth.

Due to growth in the number of people seeking managerial and management-related jobs and the increasing technical requirements in many of these occupations, experience, specialized training, or postbaccalaureate study will be needed for many of these jobs. Familiarity with computers will also be helpful as managers increasingly rely on computerized information systems to direct their organizations.

Engineers, surveyors, and architects. Workers in these occupations design machinery, highways, products, and buildings. Employment is expected to increase much faster than average because of growing international trade and increased demand for goods, services, office buildings, homes, and other facilities. Electrical and electronics engineers are expected to have the largest and most rapid employment gain in this group.

Natural, computer, and mathematical scientists. Workers in this group conduct scientific research, solve complex mathematical problems, and develop computer systems. The growing use of computers in all sectors of the economy is expected to contribute to much faster than average growth of computer systems analysts and operations research analysts. The employment of physical and life scientists is expected to increase as fast as average as research and development activities expand.

Lawyers, social scientists, social workers, and religious workers. These workers provide social services and conduct research into the behavior of individuals, groups, and society at large. Although most occupations should grow faster or much faster than average, competition for jobs is anticipated due to the large numbers of people qualified for this work. Because of declines in the college-age population, competition will be especially keen for academic positions.

Generally, prospects will be better for social scientists with advanced degrees who seek work in applied fields. Strong demand for legal services by individuals and businesses is expected to result in much faster than average growth for lawyers. Opportunities also should be good for those interested in entering the clergy.

Teachers, librarians, and counselors. Workers in these occupations help people learn, acquire information, or gain insight into themselves. In many cases, these workers must be certified before they can practice. Overall employment is projected to increase as fast as average, but individual occupational growth rates will reflect underlying demographic trends. For example, the rising participation of women in the labor force is expected to increase demand for child daycare services and, thus, preschool teachers. However, declining college enrollments should reduce demand for college faculty and create keen competition for the openings that do arise.

Health diagnosing practitioners. This group includes physicians, dentists, and other workers who diagnose, treat, and try to prevent illness and disease.

All of these occupations are growing faster than average. But, despite the expected growth in the health industry, unprecedented competition is expected for physicians, dentists, chiropractors, and veterinarians seeking to establish practices due to the large number of newly trained practitioners entering these fields each year.

Health assessing and treating occupations. This group includes registered nurses, dietitians, physician assistants, pharmacists, and therapists. Workers in these occupations care for the sick, help the disabled, and advise people on ways of maintaining or improving their health.

Job growth in the health industries where these workers are employed is much faster than average due to technological progress, public support, and changing demographics. As a result, many health occupations are expected to grow much faster than average. Registered nurses, because of their number and anticipated rapid growth, will be among the occupations providing the most new jobs through the year 2000. Opportunities should also be good for physical, occupational, and recreation therapists as demand increases for therapeutic and mental health services.

Writers, artists, and entertainers. These workers write books, magazine articles, news reports, press releases, and fiction; conduct public relations campaigns; use cameras to portray people, places, and events; design products, advertisements, and publications; create and perform artistic works; and entertain others.

The continued importance of advertising, public relations, print and broadcast communications, and entertainment should result in faster than average overall growth for these workers. However, stiff competition for jobs can

be expected because these occupations attract more applicants than there are openings. Talent, personal drive, and luck will play important roles in determining professional success. Within individual occupations, some specialties will offer better job prospects than others. For example, those interested in writing will have better opportunities as technical writers than as newspaper reporters.

Technician occupations. This group includes engineering technicians, science technicians, computer programmers, tool programmers, air traffic controllers, legal assistants, broadcast technicians, and library technicians. Workers in this group operate and program technical equipment and assist engineers, scientists, health practitioners, and other professional workers.

Changes in technology will increase demand for workers in some of these occupations while decreasing it for others. Overall employment is expected to grow as fast as average. However, this group contains the single fastest growing occupation—legal assistants; its growth will result from increased demand for legal services. The employment of computer programmers will also continue to grow rapidly, as more and more organizations use computers.

Employment growth in some other occupations in this group will be limited. For example, increased use of computer-aided design should increase the productivity of drafters and offset rising demand for drafting services, resulting in little change in employment. Similarly, growth of some health technician occupations will only be average, despite the very substantial growth in the amount of work to be performed, because of technological advances in health care.

Marketing and sales occupations. Workers in this group sell goods and services, purchase commodities and property for resale, and stimulate interest on the part of the buying public. Employment is expected to grow faster than average because of the expansion of the real estate industry and increased demand for financial, travel, and other services.

A large number of part-time and full-time positions are expected for cashiers and retail trade sales workers due to their large number and high turnover as well as employment growth. Higher paying sales occupations, such as securities and financial services sales workers, tend to be more competitive than retail sales occupations. Well-trained, personable, and ambitious people who enjoy selling will have the best chance for success.

Administrative support occupations, including clerical. Workers in this group prepare and record memos, letters, and reports, collect accounts, gather and distribute information, operate office machines, and handle other administrative tasks.

Overall employment in these occupations is expected to grow more slowly than average in response to greater automation. However, the impact of automation on individual occupations varies widely. Computer operators will grow much faster than average due to the increased use of computer systems throughout the economy. In contrast, increased automation will limit employment growth in some administrative support occupations, such as statistical clerks, data entry keyers, bookkeepers, and file clerks. Automation does not affect all occupations; receptionists and information clerks, for example, are expected to experience much faster than average growth because they are concentrated in fast-growing industries and their job duties are not easily automated.

Because many administrative support occupations are large and have relatively high turnover, opportunities should be plentiful for full- and part-time job positions, even in slow-growing occupations.

Service occupations. This group includes a wide range of workers in protective, food and beverage preparation, health, and personal and cleaning services. These occupations are expected to grow faster than average because a growing population and economy, combined with higher incomes and increased leisure time, will spur demand for all types of services.

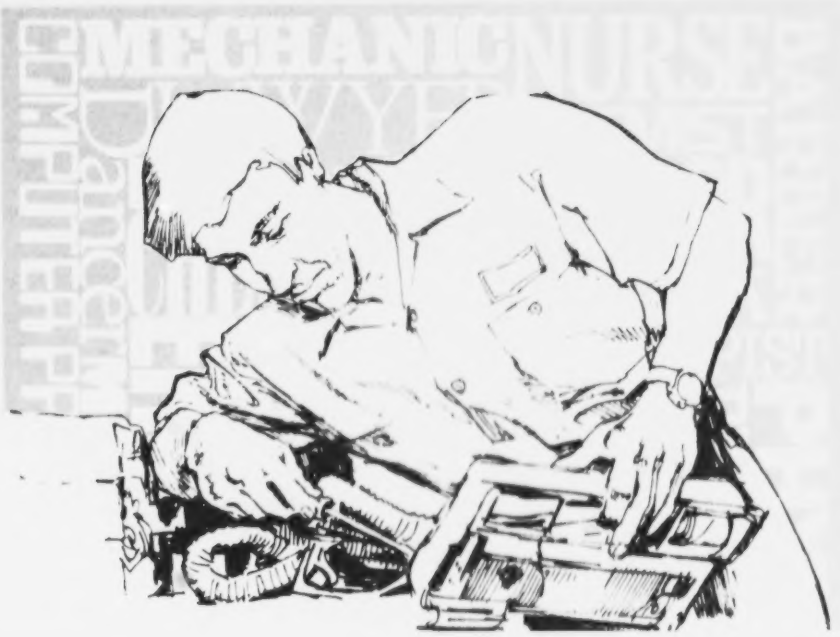
Among the protective service occupations, guards are expected to increase much faster than average because of growing concern over crime and vandalism. As the number of prisoners increases, more correction officers will also be needed. However, the anticipated slow growth of local government spending is expected to produce only average employment growth for police officers and firefighters.

Rising incomes, increased leisure, and the growing number of people who combine family responsibilities with a job are expected to contribute to much faster than average growth among food and beverage preparation service occupations. Due to the large size and high turnover, as well as the growth of many food service occupations—such as bartender and waiter and waitress—both full- and part-time jobs will be plentiful.

Growth in personal service and cleaning occupations will vary widely. For example, changing consumer preferences should result in little change in the employment of barbers, while cosmetologists will continue to grow in number.

Of the health services occupations, medical assistant, dental assistant, and nursing aide will be among the fastest growing in the economy.

Agriculture, forestry, fishing, and related occupations. Workers in these



occupations cultivate plants, breed and raise animals, and catch fish. Although demand for food, fiber, and wood is expected to increase as the world's population grows, the use of more productive farming and forestry methods and the consolidation of smaller farms are expected to result in declining employment in the majority of these occupations. However, the increased size and complexity of farms will require more technically skilled workers to manage them, leading to faster than average growth for farm managers.

Mechanics, installers, and repairers. Workers in this group adjust, maintain, and repair automobiles, industrial equipment, computers, and many other types of machinery. Average growth is expected in these occupations due to the continued importance of mechanical and electronic equipment throughout the economy. In some, employment will increase faster than average. The increased use of computers and advanced office machinery, for example, will make data processing equipment repairers one of the fastest growing occupations. For others such as automotive mechanics better automotive design and construction will lower maintenance requirements and limit employment growth.

Construction trades and extractive occupations. Workers in this group construct, alter, and maintain buildings and other structures or operate drilling and mining equipment. Although overall employment for this group is expected to grow as fast as average, construction occupations will grow faster than extractive occupations. Increases in the number of households and industrial plants are expected to lead to more construction. Alteration and modernization of existing structures, as well as the need for maintenance and repair on highway systems, dams, and bridges will also contribute to increased construction activity. In contrast, continued stagnation in the oil and gas industries and low growth in demand for coal, metal, and other materials will result in little change in the employment of extractive workers.

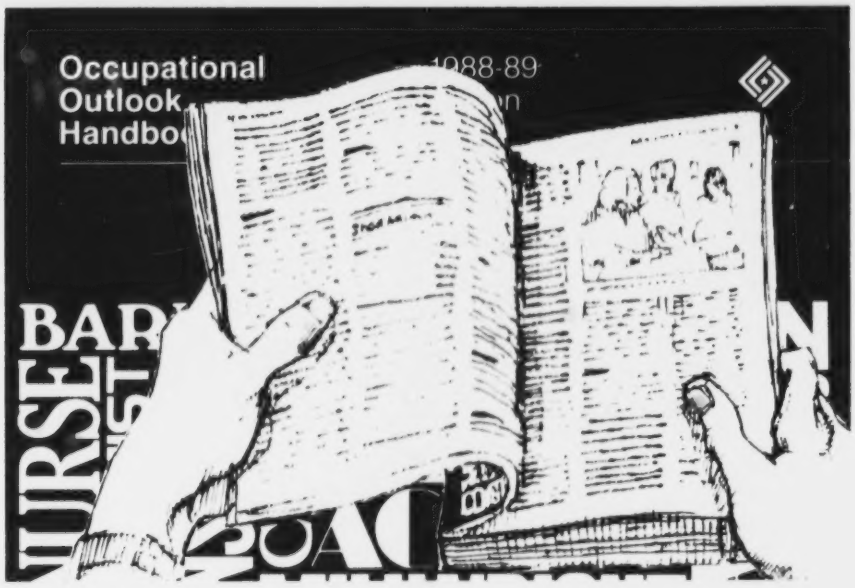
Because the construction industry is sensitive to changes in the Nation's economy, employment in construction occupations fluctuates from year to year. Many construction workers experience periods of unemployment during downturns in construction activity.

Production occupations. These workers perform tasks involved in the production of goods. They set up, adjust, operate, and tend machinery and use handtools and hand-held power tools to fabricate and assemble products. Changes in production techniques and the increased use of automated machinery, combined with little or no growth in many of the industries that employ these workers, will result in little change or slight declines in employment. For a few, however, employment growth is expected. Plastic-working machine operators, for example, are projected to grow faster than average as plastics are increasingly substituted for metal in many durable and nondurable goods. Meanwhile, expansion of the printing and publishing industry will create average growth for printing press operators.

Many production occupations are sensitive to fluctuations in the business cycle and competition from imports. When factory orders decline, workers face shortened workweeks, layoffs, and plant closings.

Transportation and material moving occupations. Workers in this group operate the equipment used to move people and materials. Although overall employment is expected to grow slower than average, prospects vary by occupation. Rapid growth in the airline industry is expected to result in faster than average growth for aircraft pilots and flight engineers. Average growth is expected for truckdrivers and busdrivers, as rising levels of economic activity increase the need for transport services. Increased use of automated material handling systems, however, is expected to result in a decline in employment for material moving equipment operators.

Handlers, equipment cleaners, helpers, and laborers. Workers in these occupations assist skilled workers and perform routine tasks as required. As more and more routine tasks are automated, employment is projected to grow more slowly than average. Yet many opportunities will arise from the need to replace workers who leave these occupations, in most of which turnover is very high. However, one should note that economic downturns may substantially lower the number of openings. This is particularly true for construction laborers and other workers in industries that are sensitive to changes in the economy.



Beyond the "Brief"

"The Job Outlook in Brief" should only be a starting point for your exploration of careers. It provides outlook information in a format that allows you to compare job prospects in different fields easily; but employment prospects should never be the sole reason for choosing a career. Matching your goals and abilities to the work done on the job and the education required is an important part of choosing a career. Where you want to live and how much money you want to earn are also important. Besides the information in the "Brief," therefore, you may want more detailed occupational information or information about other occupations.

A major source of career guidance information is the *1988-89 Occupational Outlook Handbook;* it contains more detailed outlook information on each of the occupations presented in the "Brief," as well as information about the nature of the work, qualifications, average earnings, and other subjects.

Occupational Projections and Training Data, 1988 edition, is a statistical supplement to the *Handbook;* it contains current and projected employment estimates for about 500 occupations. It also presents information on occupational separation rates, unemployment rates, and the demographic characteristics of workers when such information is available. Both the *Handbook* and *Occupational Projections and Training Data* are available from the U.S. Government Printing Office or the Bureau of Labor Statistics regional sales center—their addresses are listed on the inside front cover of this magazine. In addition, copies usually are available in libraries and the offices of school guidance counselors and employment counselors.

Additional information on job growth is also available from State public employment service or Job Service centers. The outlook for any occupation may vary considerably among local job markets. For example, sections of the country that have slow population growth may have less need for elementary school teachers than regions that have high growth. State employment service and Job Service offices, which are listed in the State government section of local telephone directories, provide information on local labor market conditions.

Key Words in the "Brief"

Changing employment between 1986 and 2000

If the statement reads. . .	Employment is projected to. . .
Grow much faster than the average	Increase 35 percent or more
Grow faster than the average	Increase 25 to 34 percent
Grow about as fast as the average	Increase 14 to 24 percent
Grow more slowly than the average	Increase 5 to 13 percent
Show little change	Increase or decrease 4 percent or less
Decline	Decrease 5 percent or more

Opportunities and competition for jobs

If the statement reads. . .	Job openings compared to job seekers may be. . .
Excellent opportunities	Much more numerous
Very good opportunities	More numerous
Good or favorable opportunities	About the same
May face competition	Fewer
May face keen or strong competition	Much fewer

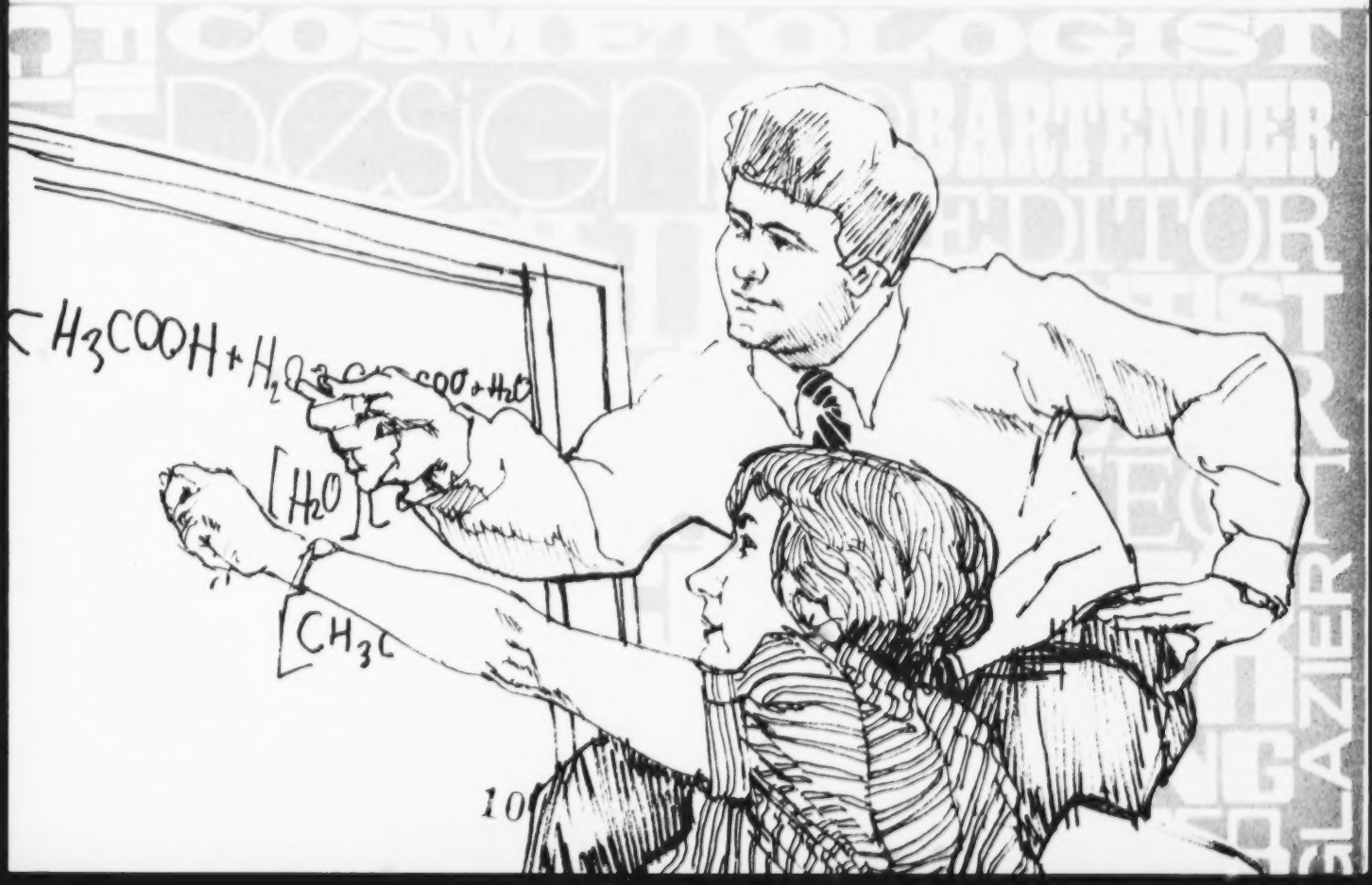
The 1988-89 Job Outlook in Brief

CLUSTER Subgroup Occupation	Estimated employment, 1986[1]	Percent change in employment, 1986–2000[1]	Numerical change in employment, 1986–2000[1]	Employment prospects
MANAGERIAL AND MANAGEMENT-RELATED OCCUPATIONS				
Accountants and auditors	945,000	40	376,000	As the number of businesses increases, more accountants and auditors will be needed to set up books, prepare taxes, and provide management advice. Much faster than average job growth is expected, which should result in favorable opportunities for those with a bachelor's or higher degree in accounting.
Construction and building inspectors	50,000	31	15,400	Although increases are expected in the level and complexity of construction activity, the assumption of inspection functions by engineers, construction managers, and maintenance supervisors should result in slower than average growth.
Cost estimators	157,000	20	31,000	Average growth is expected as more estimators are needed to predict the cost of the growing number of construction and manufacturing projects.
Education administrators	288,000	13	37,000	Employment is expected to grow more slowly than average because projected increases in enrollment in elementary and secondary schools will be offset by enrollment declines in colleges and universities. Competition is expected as teachers and other education personnel seek these jobs.
Employment interviewers	75,000	71	54,000	Much faster than average growth is expected due to the very rapid expansion of employment agencies and temporary help firms. Opportunities should be excellent for articulate, outgoing people who enjoy public contact and a fast-paced work environment.
Financial managers	638,000	24	154,000	The need for sound financial advice brought about by increasing competition, changing laws regarding taxes and other financial matters, growing emphasis on the accuracy of financial data, and the increasing variety and complexity of financial services should spur demand for financial managers. The use of computers should make these workers more productive, resulting in average growth. Opportunities will be best for those familiar with a wide range of financial services.
General managers and top executives	2,383,000	24	582,000	Average employment growth is expected as a result of expansion in the size, number, and complexity of business firms. Substantial competition is expected due to the number of lower level managers seeking advancement.
Health services managers	274,000	56	153,000	Employment is expected to grow much faster than average as the health care system expands and diversifies. Opportunities will be best in health maintenance organizations, medical group practices, and nursing homes; competition for hospital jobs will remain very strong. Management experience or a graduate degree in health administration, business, or finance is very important.

[1] Estimates are from the BLS industry-occupation matrix.
[2] Excludes self-employed workers.

CLUSTER Subgroup Occupation	Estimated employment, 1986[1]	Percent change in employment, 1986–2000[1]	Numerical change in employment, 1986–2000[1]	Employment prospects
Hotel managers and assistants	78,000	50	39,000	The increasing volume of business and vacation travel will increase demand for hotels and motels, which will create much faster than average employment growth. Opportunities should be best for persons with college degrees in hotel administration.
Inspectors and compliance officers, except construction	125,000	13	17,000	Small increases in government spending and in the number of government regulatory programs are expected to result in growth being slower than average.
Management analysts and consultants	126,000	31	40,000	Competitive pressures on organizations to operate at peak efficiency will contribute to faster than average growth. Opportunities will be best for those with a graduate degree or industry expertise. Good organizational and marketing skills are essential for persons interested in starting their own firm.
Marketing, advertising, and public relations managers	323,000	32	105,000	Intensifying domestic and foreign competition, requiring greater marketing and promotional efforts, should result in faster than average growth. Job prospects will be best for creative college graduates with extensive experience who communicate well.
Personnel, training, and labor relations specialists and managers	381,000	24	91,000	Employment is expected to grow about as fast as average so that employers will be able to meet the training and employee relations needs of an expanding work force. Growth is projected to be particularly rapid in management consulting and personnel supply firms as businesses increasingly contract with other firms to provide personnel services. The job market is expected to remain competitive.

[1] Estimates are from the BLS industry-occupation matrix.
[2] Excludes self-employed workers.



CLUSTER Subgroup Occupation	Estimated employment, 1986[1]	Percent change in employment, 1986-2000[1]	Numerical change in employment, 1986-2000[1]	Employment prospects
Property and real estate managers	128,000	39	50,000	Much faster than average job growth is expected due to increases in the number of office buildings, retail properties, and apartment complexes requiring management. Persons with a college degree in business administration or a related field should have the best job opportunities.
Purchasing agents and managers	418,000	8	35,000	Increased productivity through the growing use of computers and changing business practices are expected to restrict employment growth to a slower than average rate. Those with a college or advanced degree should have the best opportunities.
Restaurant and food service managers	470,000	28	133,000	The increase in the number of eating and drinking establishments will result in faster than average growth in employment. Opportunities are expected to be best for persons with degrees in restaurant or institutional food service management.
Underwriters	99,000	34	34,000	The expected rise in the volume and complexity of insurance products will result in faster than average growth in employment.
Wholesale and retail buyers	192,000	9	17,000	Automation and centralization of purchasing departments will result in slower than average growth in employment. Because merchandising attracts many college graduates, applicants are likely to continue to be more numerous than openings.
ENGINEERS, SURVEYORS, AND ARCHITECTS				
Engineers	1,371,000	32	444,000	Opportunities for those with degrees in engineering have been good for a number of years and this trend is expected to continue. The employment of engineers is expected to increase faster than average. Much of the growth will stem from higher levels of investment in industrial plants and equipment to meet the demand for more goods and services and to increase productivity.
Aerospace engineers	53,000	11	5,800	Unlike the past decade, employment is expected to increase more slowly than average, largely because of slower growth in defense expenditures for aircraft, missiles, and other aerospace systems.
Chemical engineers	52,000	16	8,100	Average employment growth is expected. Although two industries—pharmaceuticals and biotechnology—should provide better job opportunities than other segments of the chemical manufacturing industry, most employment growth will be in nonmanufacturing industries.
Civil engineers	199,000	25	50,000	A growing population, an expanding economy, and the resulting need to design and construct transportation systems, water resource and disposal systems, large buildings, and other structures should spur faster than average growth.
Electrical and electronics engineers	401,000	48	192,000	Increased demand for computers, electronic consumer goods, communications equipment, and other electrical and electronic products is expected to result in much faster than average growth. Because of shortages of electrical engineering professors and laboratory equipment, enrollments in electrical engineering programs may be restricted. Opportunities should be favorable.
Industrial engineers	117,000	30	35,000	Employment is expected to grow faster than average due to the expansion of the economy, the increased complexity of business operations, and the greater use of automation in factories and offices. Applicants should find good job prospects.

[1] Estimates are from the BLS industry-occupation matrix.

[2] Total exceeds the sum of the individual estimates because not all branches of engineering are covered separately.

CLUSTER Subgroup Occupation	Estimated employment, 1986[1]	Percent change in employment, 1986–2000[1]	Numerical change in employment, 1986–2000[1]	Employment prospects
Mechanical engineers	233,000	33	76,000	Faster than average growth is expected as the demand for machinery and machine tools grows and as industrial machinery and processes become increasingly complex. Opportunities should be favorable.
Metallurgical, ceramic, and materials engineers	18,000	25	4,500	Employment should increase faster than average to meet the need of the metalworking industry and other industries to develop new materials and to adapt existing ones to new applications.
Mining engineers	5,200	0	[2]	Employment is expected to remain level because demand for coal, metals, and other minerals is expected to grow slowly.
Nuclear engineers	14,000	1	[2]	Although little change in employment is expected, opportunities should be good because the number of new nuclear engineering graduates is small and has been declining.
Petroleum engineers	22,000	8	1,700	Slow growth is expected. Oil exploration and production have been curtailed by low oil prices. In the long run, however, the price of oil is likely to increase, stimulating exploration and production, which would improve employment prospects.
Architects and surveyors				
Architects	84,000	30	25,000	Faster than average growth in employment is expected due to increased construction, but growth will be slower than in recent years. Competition will continue for jobs in the most prestigious firms as well as during recessions or slowdowns in construction.
Landscape architects	18,000	38	7,000	New construction and a growing commitment to environmental planning and historic preservation will result in much faster than average growth.
Surveyors	94,000	20	19,000	Increased construction should contribute to average growth. However, employment fluctuates from year to year because construction is sensitive to changes in economic conditions.
NATURAL, COMPUTER, AND MATHEMATICAL SCIENTISTS				
Computer, mathematical, and operations research occupations				
Actuaries	9,400	48	4,500	Employment is expected to rise much faster than average as insurance sales increase and as companies introduce new forms of insurance and reevaluate existing health and pension plans. Opportunities will be best for college graduates who have passed at least two actuarial exams while still in school and have a strong background in mathematics and statistics.
Computer systems analysts	331,000	76	251,000	As computer capabilities and applications increase, employment is expected to grow much faster than average. Job prospects will be best for college graduates who combine courses in programming and systems analysis with training and experience in applied fields.
Mathematicians	20,000	24	4,800	Employment is expected to grow about as fast as average. The continuing shortage of Ph.D.'s will result in favorable opportunities for mathematicians, especially those with doctorates in applied mathematics. Those with a master's or bachelor's degree who have strong backgrounds in computer science should have good job opportunities.

[1] Estimates are from the BLS industry-occupation matrix.
[2] Less than 500.

CLUSTER Subgroup Occupation	Estimated employment, 1986[1]	Percent change in employment, 1986-2000[1]	Numerical change in employment, 1986-2000[1]	Employment prospects
Operations research analysts	38,000	54	21,000	As computer costs fall and competitive pressures grow, more organizations will turn to operations research to aid decisionmaking. Employment should increase much faster than average. Opportunities will be especially favorable in trade and service firms.
Statisticians	18,000	24	4,400	Average growth is expected as businesses, government agencies, and other organizations increasingly rely on statistics. Ph.D.'s have excellent prospects. Among master's and bachelor's degree holders in statistics, job prospects are best for those with a strong background in computer science.
Life scientists				
Agricultural scientists	28,000	22	6,300	Employment is expected to grow about as fast as average. Opportunities will be best in private industry as advances in biotechnology are applied to agriculture.
Biological scientists	61,000	23	14,000	Increased demand for genetic and biological research, in part because of efforts to preserve the environment, should result in average growth. Most growth will be in the private sector; employment in government is expected to grow slowly.
Foresters and conservation scientists	24,000	10	2,300	Budgetary constraints will reduce demand by the Federal Government and result in slower than average overall growth. However, some opportunities will be created in the private sector to improve forestry, logging, and range management practices and to increase the productivity of forests and rangelands.

[1] Estimates are from the BLS industry-occupation matrix.

CLUSTER Subgroup Occupation	Estimated employment, 1986[1]	Percent change in employment, 1986-2000[1]	Numerical change in employment, 1986-2000[1]	Employment prospects
Physical scientists				
Chemists	86,000	11	9,800	Increased productivity and centralization of research should produce slower than average growth. Job opportunities will be best in pharmaceuticals and biotechnology.
Geologists and geophysicists	44,000	13	5,800	Slower than average growth is expected. The petroleum industry, which provides jobs for most geologists and geophysicists, has greatly reduced oil and gas exploration because of the drop in oil prices. Poor employment opportunities are expected until prices increase enough to make more exploration worthwhile.
Meteorologists	5,600	29	1,600	The National Weather Service, which employs many meteorologists, plans to increase employment significantly in order to improve its short-term and local area forecasts. This should result in faster than average growth.
Physicists and astronomers	22,000	17	3,700	Average growth is expected. Job opportunities for Ph.D.'s should improve by the late 1990's as retirements increase.
LAWYERS, SOCIAL SCIENTISTS, SOCIAL WORKERS, AND RELIGIOUS WORKERS				
Lawyers	527,000	36	191,000	The demand for legal services caused by population growth and economic expansion will create much faster than average employment growth. Competition for salaried jobs is expected to ease, but the increasing difficulty of establishing a profitable small practice should result in a declining number of self-employed lawyers.

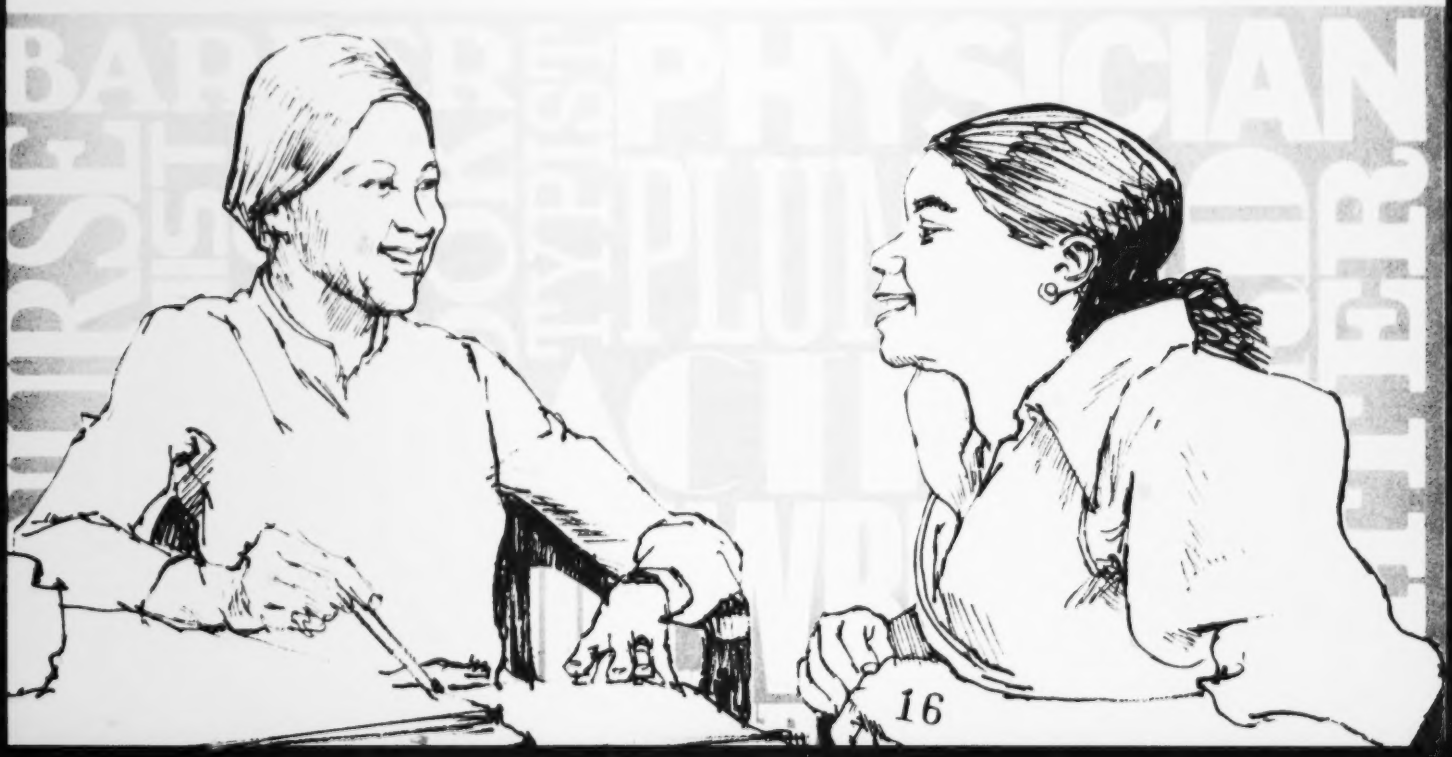
[1] Estimates are from the BLS industry-occupation matrix.

CLUSTER Subgroup Occupation	Estimated employment, 1986[1]	Percent change in employment, 1986-2000[1]	Numerical change in employment, 1986-2000[1]	Employment prospects
Social scientists and urban planners				
Economists	37,000	34	13,000	Employment is expected to increase faster than average as demand increases for financial, advertising, consulting, and research services. Although master's and bachelor's degree holders with a strong background in quantitative techniques have good prospects, opportunities will be best for doctoral degree holders. Keen competition is expected for academic positions.
Psychologists	110,000	34	37,000	Faster than average growth in employment is anticipated due to increased attention being paid to the expanding elderly population, the maintenance of mental health, and the testing and counseling of children. Ph.D.'s with training in applied areas, such as clinical or counseling psychology, and in quantitative research methods will have the best prospects. Declining college enrollments should result in keen competition for academic positions.
Sociologists	(5)	(5)	(5)	Opportunities will be best for Ph.D.'s with training in areas such as clinical sociology, gerontology, criminology, demography, and quantitative research. Very keen competition is expected for college and university positions.
Urban and regional planners	20,000	19	4,000	Increased demand for environmental, economic, and energy production planning should result in average employment growth. Opportunities will be best in rapidly growing areas and older areas undergoing preservation and redevelopment.
Social and recreation workers				
Human services workers	88,000	38	34,000	Employment is expected to grow much faster than average due to the expansion of facilities and programs for the elderly, mentally impaired, and developmentally disabled. Prospects are excellent for qualified applicants, who are always avidly sought after because of the demanding nature of the work and relatively low pay.
Social workers	365,000	33	120,000	Faster than average growth is expected in response to the needs of a growing and aging population. Employment prospects are favorable in family service agencies, home health and hospice programs, hospitals, and private practice.
Recreation workers	164,000	20	33,000	Employment is expected to increase as fast as average. More leisure time, interest in fitness and health, and programs for special groups will underlie expansion. Competition is expected for full-time career positions. Prospects for these jobs will be best in commercial recreation establishments and social service organizations. Replacement needs will generate numerous openings in local parks and recreation departments, providing favorable opportunities for persons seeking temporary seasonal jobs.
Religious workers				
Protestant ministers	429,000	(5)	(5)	While the increasing cost of operating a church will moderate demand for ministers, slower growth in the number of ordained ministers will result in less competition. The most favorable opportunities are for rural and part-time positions, but opportunities vary by denomination.

[1] Estimates are from the BLS industry-occupation matrix.
[5] Estimates not available.

CLUSTER Subgroup Occupation	Estimated employment, 1986[1]	Percent change in employment, 1986-2000[1]	Numerical change in employment, 1986-2000[1]	Employment prospects
Rabbis	6,500	[2]	[2]	Opportunities are expected to be good, especially in small communities and in areas with a rapidly growing number of retirees. Prospects vary by branch of Judaism.
Roman Catholic priests	57,000	[2]	[2]	The continuing decline in seminary enrollments is intensifying the shortage of ordained priests.
TEACHERS, LIBRARIANS, AND COUNSELORS				
Adult and vocational educational teachers	427,000	19	82,000	Employment is expected to grow as fast as average due to increased demand for self-improvement, enrichment, and vocational courses.
Archivists and curators	8,300	22	1,800	Although overall employment is expected to increase as fast as average, the employment of curators is expected to grow more rapidly than that of archivists in response to increased interest in art, history, technology, and culture.
College and university faculty	754,000	-4	-32,000	Employment is expected to decline through the mid-1990's and then begin to increase. Entrants will encounter keen competition in most disciplines through the mid-1990's; thereafter, job prospects should improve as enrollments and faculty retirements increase. Prospects are best for business, engineering, and science faculty.
Counselors	123,000	21	25,000	Employment is expected to grow as fast as average. Growth will be faster in private practice, community and social service agencies, and private industry than in schools.
Kindergarten and elementary school teachers	1,527,000	20	299,000	Average employment growth is expected as enrollments increase and class size declines. Through the early 1990's, hiring is expected to remain at current levels or increase slightly; by the middle to late 1990's, it should begin to decline. Although shortages are unlikely, prospects should be good for well-qualified applicants.

[1] Estimates are from the BLS industry-occupation matrix.
[2] Estimates not available.



CLUSTER Subgroup Occupation	Estimated employment, 1986[1]	Percent change in employment, 1986-2000[1]	Numerical change in employment, 1986-2000[1]	Employment prospects
Librarians	136,000	13	18,000	Although employment is expected to grow more slowly than average, many openings can be expected as retirements increase. The number of library school graduates is half the mid-1970's level, prompting recruitment efforts in many States. Opportunities will be best for librarians with scientific or technical qualifications.
Secondary school teachers	1,128,000	13	152,000	Slower than average growth is expected due to slight increases in enrollments and declines in class size. General shortages are unlikely. Prospects should be good for well-qualified applicants.
HEALTH PRACTITIONERS				
Chiropractors	32,000	[2]	[2]	Public acceptance of the profession and increased ability of patients to pay for chiropractic services should spur employment growth.
Dentists	151,000	30	45,000	Rising demand for dental services will result in faster than average job growth. Changes in the size and structure of the population will boost demand for restorative dentistry; demand for preventive care will rise due to increased concern about good oral health, greater affluence, and the wider availability of dental insurance. Despite the sharp decline in dental school enrollments, the oversupply of dentists is likely to continue in some localities.
Optometrists	37,000	49	18,000	The increased needs of a larger and older population, heightened awareness of the need for proper care of the eyes, and improved coverage for optometric services by private health insurance and Medicare should result in much faster than average growth. Employment prospects are favorable.

[1] Estimates are from the BLS industry-occupation matrix.
[2] Estimates not available.

CLUSTER Subgroup Occupation	Estimated employment, 1986[1]	Percent change in employment, 1986-2000[1]	Numerical change in employment, 1986-2000[1]	Employment prospects
Physicians	491,000	38	188,000	Employment is expected to grow much faster than average due to the health care needs of a growing and aging population and broad insurance coverage for medical care. However, a surplus of physicians will heighten competition for patients in some communities and for some types of practice. Prospects for employment continue to be very favorable in primary care, geriatrics, rehabilitation medicine, and psychiatry.
Podiatrists	13,000	77	10,000	Much faster than average growth is expected due to the sharply rising demand for podiatric services, in particular by older people and sports enthusiasts. Opportunities are favorable.
Veterinarians	37,000	46	17,000	Growth in the number of pets and farm animals, increased emphasis on scientific methods of raising and breeding livestock and poultry, and continued support of public health and disease control programs are expected to produce much faster than average job growth. However, new graduates will experience keen competition setting up a practice in some areas. Opportunities for specialists, including toxicologists and pathologists, will be excellent.
HEALTH ASSESSING AND TREATING OCCUPATIONS				
Dietitians and nutritionists	40,000	34	14,000	To meet the expanding needs of nursing homes, hospitals, retirement and life care communities, and social service programs, employment is expected to grow faster than average. Catering firms, restaurant chains, and medical supply firms also offer favorable job prospects.
Occupational therapists	29,000	52	15,000	Much faster than average growth is expected due to rapidly rising demand in the areas of mental health, rehabilitation, and long-term care. Good opportunities are expected in hospitals, nursing homes, school systems, schools for handicapped children, community mental health centers, home health programs, and private practice. Job prospects are excellent, with demand expected to outstrip supply.
Pharmacists	151,000	24	36,000	Spurred by the pharmaceutical needs of a larger and older population and by scientific advances that will bring more drugs onto the market, employment is expected to grow as fast as average. Excellent job prospects are anticipated in both community and clinical settings; if current trends persist, demand is likely to outstrip supply in some places.
Physical therapists	61,000	87	53,000	Much faster than average job growth is expected due to expansion of services for people with physical disabilities—a diverse and rapidly growing group that includes older people, cardiac patients, stroke victims, young people with spinal cord injuries, and the developmentally disabled. Good opportunities are expected in hospitals, rehabilitation facilities, home health agencies, nursing homes, and private practice. Job prospects are excellent, with demand expected to outstrip supply.
Physician assistants	26,000	57	15,000	The expansion of the health industry and greater reliance on physician assistants to assist with hospital procedures and provide primary care are expected to contribute to much faster than average growth. Excellent job prospects are expected in all settings, especially group medical practices, health maintenance organizations, and hospitals.

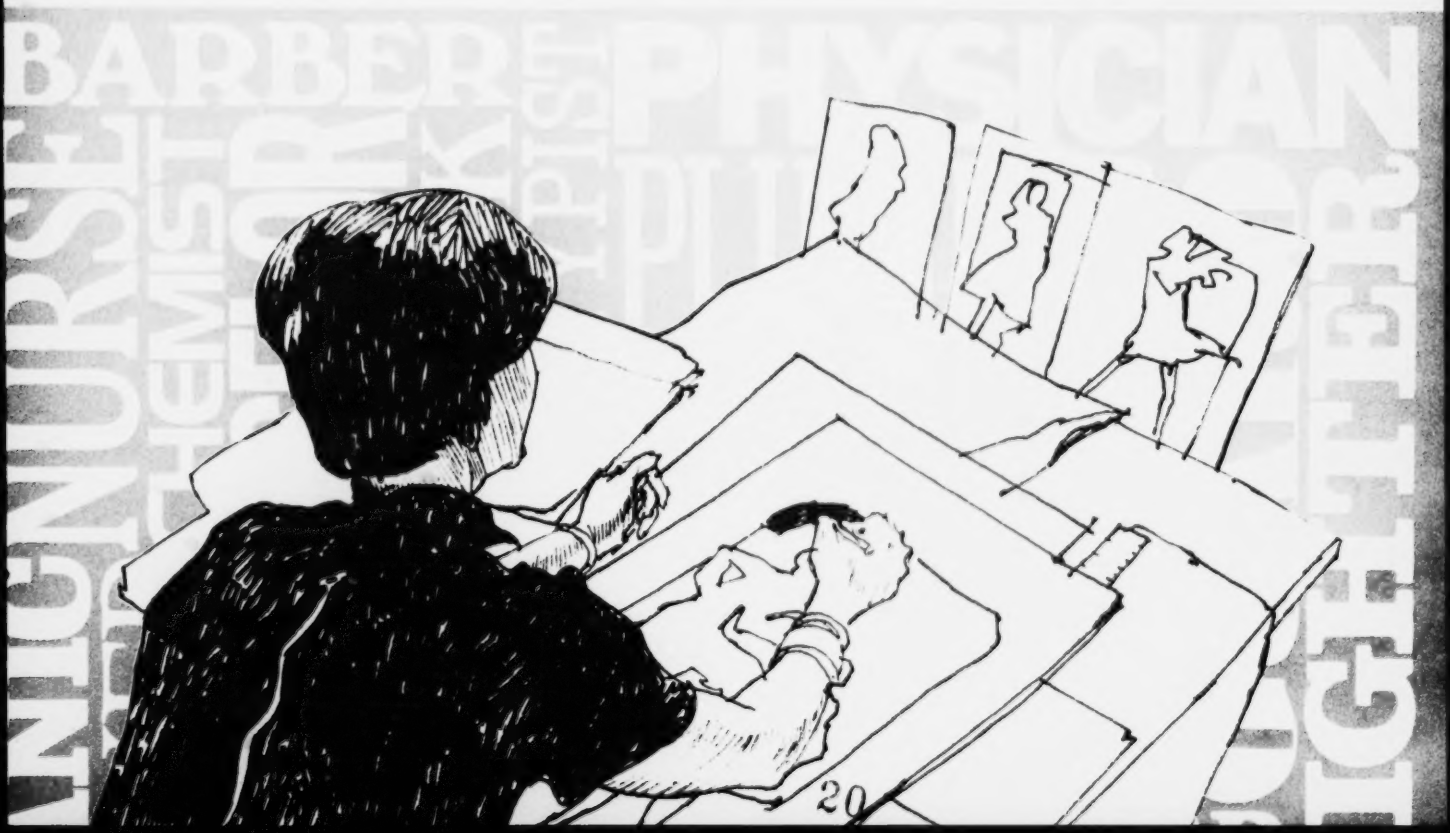
[1] Estimates are from the BLS industry-occupation matrix.

CLUSTER Subgroup Occupation	Estimated employment, 1986[1]	Percent change in employment, 1986–2000[1]	Numerical change in employment, 1986–2000[1]	Employment prospects
Recreational therapists	29,000	49	14,000	Employment is expected to grow much faster than average because of rising demand for therapeutic and mental health services in nursing homes, psychiatric hospitals, and community programs for the elderly, mentally ill, and developmentally disabled. Prospects are favorable for graduates of therapeutic recreation programs, although those seeking clinical positions may face competition.
Registered nurses	1,406,000	44	612,000	In response to the health care needs of a growing and aging population, much faster than average job growth is expected. Driving demand will be the greatly increased complexity of hospital care, together with the need for more registered nurses in health maintenance organizations, clinics, group medical practices, nursing homes, home health agencies, and community programs. Excellent prospects are anticipated for new graduates and reentrants alike; however, some career paths will be restricted to nurses with bachelor's degrees in nursing.
Respiratory therapists	56,000	34	19,000	Faster than average growth is expected, despite the efforts of hospitals to control costs because respiratory procedures are so important in the rapidly expanding area of cardiopulmonary care. Job prospects are favorable.
Speech-language pathologists and audiologists	45,000	34	15,000	The changes anticipated in the size and age structure of the population, public awareness of the need to treat speech and hearing impairments, and the ability to pay for services are expected to produce faster than average growth. Opportunities will be available in school systems, speech and hearing clinics, physicians' offices, outpatient care facilities, and private practice. Job prospects should be good.

[1] Estimates are from the BLS industry-occupation matrix.

CLUSTER Subgroup Occupation	Estimated employment, 1986[1]	Percent change in employment, 1986-2000[1]	Numerical change in employment, 1986-2000[1]	Employment prospects
WRITERS, ARTISTS, AND ENTERTAINERS				
Communications occupations				
Public relations specialists	87,000	40	35,000	Increased demand for public relations workers by corporations and other large organizations, coupled with rising demand on the part of small organizations that have not relied on these workers in the past, should cause employment to increase much faster than average. Competition should remain keen for persons without the appropriate educational background and for those who do not have related work experience.
Radio and television announcers and newscasters	61,000	24	15,000	Average growth is expected as new radio and TV stations are licensed and the number of cable TV stations continues to grow. Competition for beginning jobs will be very strong because the broadcasting field attracts many more jobseekers than there are jobs. Jobs will be easier to find in radio than in television because more radio stations hire beginners.
Reporters and correspondents	75,000	18	13,000	Employment is expected to grow about as fast as average. Overall, college graduates who have majored in news-editorial journalism, who have completed an internship while in school, and who have work experience should have the best prospects for reporting jobs. The best opportunities are likely to be found on newspapers and magazines in small towns and suburbs.
Writers and editors	214,000	34	73,000	Increased demand for salaried writers in publishing, communications, and advertising should cause employment to rise faster than average. Keen competition is expected to continue. Opportunities will be best in firms that prepare business and trade publications and in technical writing.

[1] Estimates are from the BLS industry-occupation matrix.



CLUSTER Subgroup Occupation	Estimated employment, 1986[1]	Percent change in employment, 1986-2000[1]	Numerical change in employment, 1986-2000[1]	Employment prospects
Visual arts occupations				
Designers	259,000	32	84,000	Continued emphasis on the quality and visual appeal of products will prompt faster than average growth for designers, especially industrial designers; but competition is expected to remain keen because the number of talented people attracted to this field continues to exceed openings.
Photographers and camera operators	109,000	33	37,000	Although many positions will be short term or part time, employment is expected to grow faster than average. Much of the growth will be in portrait studios, newspapers, and commercial art firms. Rapid growth is expected for camera operators in television broadcasting and motion picture production. Nevertheless, competition for these jobs is expected to remain keen.
Visual artists	176,000	34	59,000	Strong demand for art, illustration, and design by advertising agencies, publishing firms, and other businesses will stimulate faster than average growth. Competition for jobs will continue to be keen.
Performing arts occupations				
Actors, directors, and producers	73,000	34	24,000	As the entertainment industry expands, employment is expected to grow faster than average, but continued overcrowding in this field will cause keen competition for jobs.
Dancers and choreographers	14,000	31	4,300	Although employment is projected to increase faster than average due to growth in the entertainment industry, keen competition is expected to continue.
Musicians	189,000	23	42,000	Employment is expected to grow as fast as average. However, competition is expected to remain keen and only the most talented will find regular employment.
TECHNICIAN OCCUPATIONS				
Health technologists and technicians				
Clinical laboratory technologies and technicians	239,000	24	57,000	Although testing to detect, diagnose, and monitor the treatment of disease will greatly increase, advances in laboratory automation should boost productivity, resulting in average employment growth. Many jobs will be in hospitals, but new opportunities will emerge in commercial laboratories, health maintenance organizations, and doctors' offices due to changes in technology and business strategy.
Dental hygienists	87,000	63	54,000	Much faster than average growth is expected because of an expanding population, growing awareness of the importance of dental care, increasing availability of dental insurance, and changing patterns of dental practice, which encourage the use of support staff.
Dispensing opticians	50,000	46	23,000	As the population ages, the need for corrective lenses will grow. In response, employment is expected to increase much faster than average. Opportunities should be excellent for persons with an associate degree in opticianry.
EEG technologists and technicians	5,900	42	2,500	Much faster than average growth is expected due to the widespread use of the EEG (electroencephalograph) for diagnosing and monitoring neurological, psychological, and other disorders. Job prospects will be especially favorable in the offices of neurologists, medical group practices, and health maintenance organizations. Opportunities will be excellent for applicants with some background in EEG technology.

[1] Estimates are from the BLS industry-occupation matrix.

CLUSTER Subgroup Occupation	Estimated employment, 1986[1]	Percent change in employment, 1986-2000[1]	Numerical change in employment, 1986-2000[1]	Employment prospects
EKG technicians	18,000	16	2,900	Employment is expected to grow only about as fast as average despite the importance of the EKG (electrocardiograph) in the prevention, diagnosis, and treatment of heart disease. Productivity gains associated with new equipment and efforts to streamline hospital staff will constrain opportunities for entry level EKG technicians, even as demand for those with advanced skills soars.
Emergency medical technicians	65,000	15	9,800	Increased demand for emergency medical services should result in average job growth. Opportunities will be best in municipal governments and private ambulance services. Job prospects will be excellent due to high turnover.
Licensed practical nurses	631,000	38	238,000	Much faster than average growth is expected due to rising demand in nursing homes, personal care facilities, home health programs, and other long-term care settings. Replacement needs will create many openings, especially in hospitals. Excellent job prospects are expected for new graduates and experienced nurses alike.
Medical record technicians	40,000	75	30,000	The heightened importance of medical records for financial management and quality control will produce much faster than average job growth. Excellent job prospects are anticipated in all settings for graduates of accredited programs in medical record technology.
Nuclear medicine technologists	9,700[2]	23	2,200	More diverse opportunities will be available than in the past as jobs become available in outpatient imaging centers, offices of physicians, and medical laboratories. However, job growth will only be average because new diagnostic applications of nuclear medicine will be offset by competition from less invasive imaging techniques.

[1] Estimates are from the BLS industry-occupation matrix.

CLUSTER Subgroup Occupation	Estimated employment, 1986[1]	Percent change in employment, 1986-2000[1]	Numerical change in employment, 1986-2000[1]	Employment prospects
Radiologic technologists	115,000	65	75,000	Employment is expected to grow much faster than average as radiologic technologies play an even greater role in the diagnosis and treatment of disease. Local shortages and surpluses of radiographers are expected to persist. However, demand for radiation therapy technologists and ultrasound technologists is expected to remain strong everywhere.
Surgical technicians	37,000	33	12,000	Faster than average job growth is likely as the volume of surgery continues to rise. Most jobs will be in hospitals, despite the rapid growth of outpatient surgical centers. Prospects will be best for graduates of formal training programs and for certified surgical technicians.
Technologists and technicians, except health				
Air traffic controllers	26,000	8	2,100	Despite the increase in air traffic, employment is expected to increase more slowly than average as a result of the increased use of automated air traffic control equipment. Keen competition is expected because the occupation's relatively high pay and liberal retirement program attract many applicants.
Broadcast technicians	27,000	20	5,400	Although employment is expected to grow about as fast as average, laborsaving advances such as computer-controlled programming and the remote control of transmitters will keep the employment of broadcast technicians from growing as fast as that of the broadcasting industry. Job competition will continue to be keen, with the best prospects occurring in small cities and towns.
Computer programmers	479,000	70	335,000	Employment is expected to grow much faster than average as the use of computers expands. Job prospects will be best for college graduates who majored in computer science or a related area and have experience or training in fields such as accounting, management, engineering, or science. Applicants with less than a bachelor's degree and no experience are likely to face strong competition.
Drafters	348,000	2	5,500	Little change in employment is expected because the widespread use of computer-aided design equipment—which increases drafters' productivity—is expected to offset growth in demand for drafting services.
Engineering technicians	689,000	35	245,000	Anticipated increases in research and development expenditures and continued rapid growth in the number of technical products are expected to result in much faster than average growth.
Legal assistants	61,000	104	64,000	Much faster than average growth is expected as the use of legal assistants to aid lawyers increases. Job prospects are likely to be best for persons with formal legal assistant training.
Library technicians	51,000	13	6,600	Employment is expected to grow more slowly than average. The best job prospects are likely to be in business, law, and other special libraries.
Science technicians	227,000	15	35,000	Expansion in research and development and in the production of technical products will result in average overall growth. The employment of biological technicians is expected to grow faster than the occupation as a whole, while that of chemical, nuclear, and petroleum technicians should grow more slowly.

[1] Estimates are from the BLS industry-occupation matrix.

CLUSTER Subgroup Occupation	Estimated employment, 1986[1]	Percent change in employment, 1986-2000[1]	Numerical change in employment, 1986-2000[1]	Employment prospects
Tool programmers, numerical control	8,800	15	1,300	Rapidly increasing use of numerically controlled machine tools should result in employment growth that is as fast as average; however, the standardization of programming languages—which increases programmers' productivity—will hold down the growth of the occupation.
MARKETING AND SALES OCCUPATIONS				
Cashiers	2,165,000	27	575,000	Employment is expected to grow faster than average due to the anticipated growth of retail sales and the popularity of discount and self-service retailing, which has led to the rise of centralized cashier stations. Opportunities for full- and part-time jobs will be plentiful. Overall prospects should be excellent for individuals with basic mathematics and communications skills; competition for unionized jobs is likely to continue to be keen.
Counter and rental clerks	178,000	34	60,000	Faster than average employment growth is expected due to the anticipated growth in rental and leasing services. Prospects for full- and part-time jobs are excellent.
Insurance sales workers	463,000	22	102,000	Due to increasing productivity and changing business practices, employment will not keep pace with the rising level of insurance sales, but employment growth will still be as fast as average. Turnover is high because many beginners cannot establish a sufficient clientele. Opportunities will be best for ambitious people who enjoy selling and develop expertise in many different types of insurance and investments.
Manufacturers' sales workers	[2] 543,000	3	18,000	Little change is expected in employment as manufacturers make greater use of wholesale distribution channels and electronic ordering systems. The outlook differs by industry, however, because business conditions and marketing strategies vary. As in other sales occupations, turnover is relatively high, and replacement needs will provide many opportunities for individuals who have the requisite technical knowledge and personal traits.
Real estate agents and brokers	376,000	44	166,000	The growing volume of sales of residential and commercial properties is expected to result in much faster than average growth. While positions should continue to be relatively easy to obtain, well-trained, ambitious people who enjoy selling have the best chance for success in this highly competitive field.
Retail sales workers	[2] 4,266,000	32	1,345,000	Employment is expected to grow faster than average due to anticipated growth in retail sales establishments. Job prospects will be excellent for full-time, part-time, and temporary workers. However, applicants seeking higher paying jobs selling expensive merchandise will face keen competition.
Securities and financial services sales representatives	197,000	42	82,000	As economic growth and rising personal incomes increase the funds available for investment and as banks and other financial institutions offer an increasing array of financial services, employment is expected to grow much faster than average. However, job competition will remain keen, particularly in large firms, due to the potential for high earnings. Many beginners leave this occupation because they are unable to establish a sufficient clientele.
Services sales representatives	[2] 419,000	56	237,000	The continued rapid increase in the demand for services will result in much faster than average employment growth. Growth is expected to be most rapid in the data processing, personnel supply, and advertising industries. Applicants with college training or a proven sales record have the best job prospects.

[1] Estimates are from the BLS industry-occupation matrix.
[2] Excludes self-employed workers.

CLUSTER Subgroup Occupation	Estimated employment, 1986[1]	Percent change in employment, 1986-2000[1]	Numerical change in employment, 1986-2000[1]	Employment prospects
Travel agents	105,000	46	49,000	Much faster than average employment growth is projected due to the large increases expected in both vacation and business-related travel.
Wholesale trade sales workers	[2] 1,217,000	33	405,000	Expansion in the volume and selection of goods and in the use of wholesale distribution firms by manufacturers—which results in less use of their own sales forces—should create faster than average growth. Very favorable job prospects are anticipated for individuals with sales ability. As in other sales occupations, turnover is relatively high and the number of job openings will be quite large.
ADMINISTRATIVE SUPPORT OCCUPATIONS, INCLUDING CLERICAL				
Bank tellers	539,000	13	71,000	The continuing expansion of the use of automatic teller machines and other electronic data processing equipment will result in slower than average growth. However, full-time and part-time openings will be plentiful because replacement needs are high.
Bookkeepers and accounting clerks	2,116,000	4	92,000	Although the volume of business transactions is expected to grow rapidly, little change is expected in employment due to the increased use of computers. Nevertheless, job openings will be numerous because the occupation is so large.
Clerical supervisors and managers	956,000	21	205,000	The expanding volume of clerical work is expected to generate average job growth.

[1] Estimates are from the BLS industry-occupation matrix.
[2] Excludes self-employed workers.

CLUSTER Subgroup Occupation	Estimated employment, 1986[1]	Percent change in employment, 1986-2000[1]	Numerical change in employment, 1986-2000[1]	Employment prospects
Computer and peripheral equipment operators	309,000	48	148,000	The increased use of computers throughout the economy should spur much faster than average growth. As more organizations use networks of mini- or midsize computers rather than mainframes, a growing number of operators can be expected to work on the smaller machines.
Data entry keyers	400,000	-16	-66,000	Employment is expected to decline due to improved and more widely used data entry technologies, such as optical scanners.
File clerks	242,000	13	32,000	Employment is expected to grow more slowly than average as recordkeeping systems become more automated. Openings should be plentiful because replacement needs are high.
General office clerks	2,361,000	20	462,000	Average employment growth is expected as more employers opt for the flexibility offered by these workers. The growth in the number of small businesses will also spur growth. Despite this rise in demand, high turnover will account for most job openings.
Insurance claims and policy processing occupations	388,000	11	42,000	Overall employment is expected to increase more slowly than average. However, the employment of claims representatives is expected to grow faster than average as the increasing volume of insurance sales results in more insurance claims. Little or no change is expected in the employment of insurance processing clerks due to the greater use of word processors, computers, and other office machines.
Postal clerks and mail carriers	639,000	6	40,000	Although rising mail volume is anticipated, employment is expected to increase more slowly than average because automation is expected to increase the productivity of clerks and carriers. Competition is expected to be keen as the number of applicants continues to exceed the number of openings by far.
Receptionists and information clerks	682,000	41	282,000	As business and professional services continue to expand, employment is expected to grow much faster than average. Job prospects should be most favorable for those with typing and other office skills.
Reservation and transportation ticket agents and travel clerks	122,000	20	24,000	Growing demand for travel services is expected to increase employment as fast as average. However, applicants can anticipate considerable competition, especially in the airline industry.
Secretaries	3,234,000	13	424,000	Due to office automation and changing staffing patterns, slower than average employment growth is anticipated. However, job prospects should be good because of replacement needs.
Statistical clerks	71,000	-26	-19,000	The growing use of sophisticated statistical software on personal computers should result in employment declines.
Stenographers	178,000	-28	-50,000	Although overall employment is expected to decline because of the widespread use of dictation machines, demand should be strong for shorthand reporters.
Stock clerks	1,813,000	11	202,000	Automation and other improvements in productivity are expected to permit clerks to handle more stock; as a result, slower than average growth is projected. However, those working on the sales floor will be less affected by automation.

[1] Estimates are from the BLS industry-occupation matrix.

CLUSTER Subgroup Occupation	Estimated employment, 1986[1]	Percent change in employment, 1986-2000[1]	Numerical change in employment, 1986-2000[1]	Employment prospects
Teacher aides	648,000	19	125,000	Employment is expected to grow as fast as average, reflecting rising enrollments. Legislation requiring public schools to provide special education will also increase demand for aides.
Telephone operators	353,000	11	38,000	Overall employment is expected to grow more slowly than average. The employment of switchboard operators is expected to grow about as fast as average as businesses expand, while that of telephone company operators is expected to decline as automation continues to increase productivity and efficiency.
Traffic, shipping, and receiving clerks	548,000	7	38,000	Due to the increased use of more efficient equipment, employment is expected to increase more slowly than average. Nonetheless, many job opportunities will be created by replacement needs.
Typists and word processors	1,002,000	-14	-140,000	Employment is expected to decline because of the increased productivity of word processing equipment and the trend towards professionals and other office workers doing more of their own word processing. Nevertheless, many job opportunities are expected because the occupation is large.
SERVICE OCCUPATIONS				
Protective service occupations				
Correction officers	176,000	34	60,000	As correctional facilities expand and additional officers are hired to supervise and counsel a growing number of inmates, employment is expected to increase faster than average.
Firefighting occupations	279,000	17	47,000	Due to an increase in the population and the need for protection from fires, employment will increase about as fast as average. Keen competition is likely in most areas; the best opportunities are likely to be found in smaller communities with expanding populations.

[1] Estimates are from the BLS industry-occupation matrix.

CLUSTER Subgroup Occupation	Estimated employment, 1986[1]	Percent change in employment, 1986-2000[1]	Numerical change in employment, 1986-2000[1]	Employment prospects
Guards	794,000	48	383,000	Increasing concern about crime, vandalism, and terrorism will stimulate the need for guards, resulting in much faster than average growth. Opportunities will be best for those who work for contract security agencies. Competition is expected for in-house guard jobs, which generally have higher salaries, more benefits, better job security, and greater potential for advancement.
Police, detectives, and special agents	489,000	18	87,000	Employment is expected to rise about as fast as average due to an increase in the population and the need for police protection. Keen competition is expected, particularly for higher paying jobs in large police departments and law enforcement agencies.
Food and beverage preparation and service occupations				
Chefs, cooks, and other kitchen workers	2,563,000	34	864,000	Faster than average growth is expected due to the increasing size of the population and economy, while higher incomes and increased leisure time allow people to dine out more often. Openings are expected to be plentiful because turnover is substantial in many of these jobs.
Food and beverage service workers	4,204,000	39	1,628,000	Employment is expected to grow much faster than average due to the increase anticipated in the population, economy, personal incomes, and leisure time. Replacement needs should account for many job openings because of high turnover.
Health service occupations				
Dental assistants	155,000	57	88,000	Much faster than average employment growth is expected as demand for dental care increases and dentists make greater use of assistants for routine tasks.

[1] Estimates are from the BLS industry-occupation matrix.

CLUSTER Subgroup Occupation	Estimated employment, 1986[1]	Percent change in employment, 1986-2000[1]	Numerical change in employment, 1986-2000[1]	Employment prospects
Medical assistants	132,000	90	119,000	Because of the very rapid expansion of doctors' offices, group medical practices, health maintenance organizations, clinics, and other health care facilities, much faster than average growth is expected. Excellent prospects for assistants with formal training or experience. Demand is expected to be so great that employers will train applicants with no background as medical assistants, provided they exhibit the necessary personal traits.
Nursing aides and psychiatric aides	1,312,000	33	437,000	In response to rising demand in nursing homes, rehabilitation facilities, home health programs, and other settings, overall employment is expected to grow faster than average. Replacement needs will provide many additional jobs in acute care hospitals. The employment of psychiatric aides is expected to grow more slowly than average in line with long-term trends in public mental hospitals. Excellent job prospects are expected for qualified applicants in both occupations; employers have traditionally had difficulty recruiting and retaining aides.
Personal service and cleaning occupations				
Barbers	80,000	1	800	Little change in employment is expected despite the growth of the population because of changing consumer preferences. Opportunities will be best for barbers who offer hairstyling services.
Childcare workers	589,000	20	118,000	The anticipated increase in the proportion of preschoolers with working mothers should result in average employment growth.
Cosmetologists and related workers	595,000	18	107,000	Rising demand for beauty shop services should produce average employment growth. Job opportunities are expected to be plentiful, especially for part-time work, because many workers leave these occupations each year, primarily to tend to household responsibilities.
Flight attendants	80,000	32	26,000	Increases in the number and size of planes will result in faster than average employment growth. Applicants with some college training and experience dealing with the public have the best job prospects because competition for jobs is likely to remain keen.
Homemaker-home health aides	197,000	71	139,000	A substantial increase in the elderly population, burgeoning efforts to care for chronically ill children at home, and growing availability of in-home services should spur much faster than average growth.
Janitors and cleaners	2,676,000	23	604,000	Employment is projected to grow as fast as average as the number of office buildings, factories, hospitals, schools, and other structures increases. Much faster than average growth is expected in firms supplying building maintenance services because more organizations will contract with other companies to clean their buildings.
Private household workers	981,000	-3	-26,000	Although the demand for household services is expected to grow along with the number of women in the labor force who need these services, employment is expected to show little or no change because of the limited number of people willing to enter, or stay in, this occupation.
AGRICULTURE, FORESTRY, FISHING, AND RELATED OCCUPATIONS				
Farm operators and managers	1,336,000	-21	-285,000	The trend toward fewer and larger farms will result in declining employment of farm operators. However, the increasing complexity of farming should increase demand for highly trained and experienced farm managers.

[1] Estimates are from the BLS industry-occupation matrix.

CLUSTER Subgroup Occupation	Estimated employment, 1986[1]	Percent change in employment, 1986-2000[1]	Numerical change in employment, 1986-2000[1]	Employment prospects
Timber cutting and logging occupations	103,000	-7	-6,900	The increased mechanization of logging operations and improvements in equipment will produce declining employment. However, as large companies contract with small logging operations, job prospects should remain favorable in small logging contractors.
MECHANICS, INSTALLERS, AND REPAIRERS				
Aircraft mechanics and engine specialists	107,000	20	22,000	Average employment growth is expected due to an increase in air traffic. Because airlines offer relatively high wages and appealing travel benefits, competition can be anticipated for jobs with them; general aviation, however, will offer excellent job opportunities, particularly for experienced mechanics.
Automotive body repairers	214,000	12	25,000	Slower than average growth is projected because the greater use of corrosion-resistant plastic for automobile body panels is expected to offset partially the impact of growth in the number of vehicles and the popularity of lighter weight cars that are more vulnerable in collisions.
Automotive mechanics	748,000	8	60,000	Declining employment in gasoline service stations and the lengthening interval between routine service operations are expected to offset the increase in the number of motor vehicles on the road, resulting in slower than average employment growth. Opportunities should be plentiful for persons who complete formal automotive mechanic training programs.
Commercial and industrial electronic equipment repairers	81,000	28	23,000	The increased use of electronic equipment to automate production and other processes is expected to result in faster than average growth.
Communications equipment mechanics	109,000	-21	-23,000	Employment is expected to decline due to the tremendous productivity increases associated with the computerization of telecommunications equipment.
Computer service technicians	69,000	80	56,000	Much faster than average growth is expected as more computers are used in homes and offices. Demand will not keep pace with sales, however, because computers are becoming more reliable and easier to repair.
Diesel mechanics	263,000	24	63,000	As diesel powered buses and trucks grow in number, employment is expected to grow about as fast as average. Those who complete formal diesel mechanic training programs should have the best job prospects.
Electronic home entertainment equipment repairers	49,000	20	9,900	Employment is expected to increase about as fast as average in response to the growing number of television sets, video games, disk players, radios, phonographs, tape recorders, and other home entertainment products in use.
Elevator installers and repairers	15,000	22	3,400	The increased number of structures with elevators and escalators along with the increased stock of equipment needing maintenance and repair are expected to result in average growth.
Farm equipment mechanics	52,000	4	1,900	Little employment change is expected because the consolidation of farm land into fewer and larger farms enables farmers to produce more with the same amount of equipment. Opportunities are expected to be best for persons who complete formal training in farm equipment repair or diesel mechanics.
General maintenance mechanics	1,039,000	22	232,000	Average growth is expected in response to the increasing number of office and apartment buildings, stores, schools, hospitals, hotels, and factories.

[1] Estimates are from the BLS industry-occupation matrix.

CLUSTER Subgroup Occupation	Estimated employment, 1986[1]	Percent change in employment, 1986-2000[1]	Numerical change in employment, 1986-2000[1]	Employment prospects
Heating, air-conditioning, and refrigeration mechanics	222,000	22	50,000	Employment is expected to increase as fast as average due to demand for new industrial, commercial, and residential climate control systems. Maintenance of existing systems should also create job opportunities.
Home appliance and power tool repairers	76,000	10	7,700	Slower than average growth is expected due to the increasing use of electronic parts, such as solid-state circuits, microprocessors, and sensing devices, that make appliances more reliable.
Industrial machinery repairers	421,000	6	26,000	Employment is expected to grow more slowly than average because of the generally lower maintenance requirements of new industrial equipment.
Line installers and cable splicers	227,000	0	[4]	Little change in employment is expected due to productivity increases brought about by technological changes such as fiber optic cable.
Millwrights	86,000	8	7,200	Although the increasing automation of manufacturing will result in greater demand for the installation, maintenance, and repair of this equipment, its lower maintenance requirements should result in slower than average growth.
Mobile heavy equipment mechanics	102,000	24	25,000	Average growth is anticipated due to increases in the amount of construction and defense-related mobile heavy equipment in operation. Job prospects are expected to be best for persons with formal training in diesel or heavy equipment mechanics.
Motorcycle, boat, and small engine mechanics	49,000	21	10,000	Overall employment is expected to increase as fast as average as rising incomes enable more persons to buy boats and lawn and garden power equipment. However, motorcycle mechanic jobs will increase more slowly than average because of the shrinking number of persons in the 18-24 age group.
Musical instrument repairers and tuners	8,100	7	600	Although the rising number of musical instruments in use will assure continued demand for repairers, employment is expected to increase more slowly than average due to the limited opportunities for training.

[1] Estimates are from the BLS industry-occupation matrix.
[4] Less than 500.

CLUSTER Subgroup Occupation	Estimated employment, 1986[1]	Percent change in employment, 1986-2000[1]	Numerical change in employment, 1986-2000[1]	Employment prospects
Office machine and cash register servicers	56,000	40	22,000	To process the growing volume of paper work, businesses, governments, and other organizations are expected to install more office equipment. The employment of workers who service this equipment is projected to increase much faster than average.
Telephone installers and repairers	58,000	-32	-18,000	Employment is expected to decline due to laborsaving advances, such as plug-in telephones, more efficient equipment testing procedures, and modular assembly of telephone equipment.
Vending machine servicers and repairers	27,000	12	3,100	Despite the rise expected in the number of vending machines in use, employment should increase more slowly than average because of the greater reliability of new equipment.
CONSTRUCTION TRADES AND EXTRACTIVE OCCUPATIONS				
Bricklayers and stonemasons	161,000	16	26,000	Increased construction of homes, offices, and other brick structures will contribute to average employment growth.
Carpenters	1,010,000	18	182,000	Demand for new housing and industrial plants and the need to renovate existing structures will result in average employment growth.
Carpet installers	66,000	26	17,000	Demand for wall-to-wall carpet in new construction and the need to replace existing carpet will result in faster than average employment growth.
Cement masons and terrazzo workers	118,000	21	24,000	Because concrete is an essential building material, increased construction should contribute to average employment growth.
Drywall workers and lathers	154,000	24	37,000	Employment is expected to grow as fast as average due to increased construction. Opportunities should be best in commercial construction.

[1] Estimates are from the BLS industry-occupation matrix.

CLUSTER Subgroup Occupation	Estimated employment, 1986[1]	Percent change in employment, 1986-2000[1]	Numerical change in employment, 1986-2000[1]	Employment prospects
Electricians	556,000	16	89,000	Average growth should result from the need to install and maintain electrical wiring in new facilities and replace existing wiring. Increased use of telecommunications and computer equipment should also create job opportunities for electricians.
Glaziers	47,000	19	9,100	Increasing use of glass for new residential and commercial buildings and the need to replace glass should result in average growth.
Insulation workers	62,000	22	13,000	The construction of new residential, commercial, and industrial structures should result in average growth. Asbestos removal and abatement programs will also contribute to employment opportunities.
Painters and paperhangers	412,000	22	90,000	Employment is expected to grow about as fast as average as construction increases and the number of buildings needing repainting grows.
Plasterers	28,000	12	3,300	The continued preference for drywall instead of plaster should result in slower than average growth. However, plaster may regain some share of the market because of the innovative coatings available, the durability of plaster, and the architectural effects it makes possible.
Plumbers and pipefitters	402,000	17	69,000	Construction of new industrial, commercial, and residential structures and maintenance of existing ones are expected to result in average growth.
Roofers	142,000	28	39,000	New construction and the need to repair and replace roofs will cause employment to increase faster than average.
Roustabouts	56,000	-7	-4,200	Reduced exploration and production in the oil industry and increased automation in the oil fields will result in declining employment. Job opportunities are best for roustabouts with previous experience or formal training in petroleum technology.
Sheet-metal workers	93,000	22	20,000	Employment is expected to grow as fast as average as more factories, shopping malls, homes, and other structures using sheet metal are built. Additional job opportunities will be created as more efficient air-conditioning and heating systems are installed in existing buildings.
Structural and reinforcing metal workers	86,000	20	17,000	Growing demand for nonresidential buildings, transmission towers, highways, and bridges and their maintenance should result in average growth.
Tilesetters	32,000	25	7,800	Employment is expected to increase faster than average as tile is increasingly used in entranceways, foyers, and common areas of buildings.
PRODUCTION OCCUPATIONS				
Apparel workers	1,081,000	-9	-97,000	Employment is expected to decline due to imports, offshore assembly, and automation. Job prospects will be best for custom tailors and pressing machine operators for whom employment opportunities exist in nonmanufacturing industries, such as retail clothing stores, laundries, and drycleaners.
Bindery workers	83,000	22	18,000	Average job growth is expected as the printing and publishing industry expands. Most jobs will be in commercial printing plants or bindery trade shops. Opportunities are very limited for hand bookbinders.
Blue-collar worker supervisors	1,823,000	8	144,000	Employment is expected to increase more slowly than average due to declining manufacturing employment caused by foreign competition.

[1] Estimates are from the BLS industry-occupation matrix.
[2] Excludes self-employed workers.

CLUSTER Subgroup Occupation	Estimated employment, 1986[1]	Percent change in employment, 1986-2000[1]	Numerical change in employment, 1986-2000[1]	Employment prospects
Boilermakers	30,000	5	1,600	Slower than average growth is expected due to the trend in most industries to repair rather than replace defective boilers. Repairing a boiler requires fewer boilermakers than manufacturing and assembling a new one.
Butchers and meatcutters	248,000	4	11,000	Although demand for meat is expected to rise, little change in employment is expected because meat will increasingly be processed and packaged at central plants, thus avoiding final cutting at grocery stores.
Compositors and typesetters	96,000	9	8,300	Despite the anticipated expansion of the printing industry, employment is expected to grow more slowly than average because of new labor-saving technologies. Replacement needs will provide most job openings. Experienced individuals will have the best prospects.
Dental laboratory technicians	46,000	39	18,000	Much faster than average employment growth is expected due to the rising demand for crowns, bridges, dentures, and dental appliances that is anticipated to result from changes in the size and structure of the population and in the public's ability and willingness to pay for corrective and cosmetic dentistry.
Electric powerplant operators and power distributors and dispatchers	45,000	11	4,900	Employment is expected to grow more slowly than average. The use of automatic controls and more efficient equipment will keep employment from growing as fast as the demand for electric power. Although few, if any, nuclear power plants are likely to be ordered before the year 2000, some additional operators will be needed to staff plants under construction.
Inspectors, testers, and graders	694,000	0	-2,600	Little change expected in employment due to increasing automation and rising imports. Nevertheless, many job openings will be available due to the relatively large size of the occupation.
Jewelers	36,000	22	8,100	Average growth is expected as the demand for jewelry and jewelry repair increases. Because of rising imports, those interested in jewelry manufacturing will encounter keen competition.
Lithographic and photoengraving workers	77,000	25	19,000	Employment is expected to grow faster than average for lithographers and decline for photoengravers in response to the shift from letterpress to offset printing. Opportunities will be best for graduates of postsecondary school programs in printing technology.
Machinists	378,000	-1	-5,500	Little change is expected in employment. Growth of imports, improved technology, and increased use of nonmetal parts should reduce demand. However, as retirements increase, opportunities will be favorable for those with the necessary skills and training.
Metalworking and plastic-working machine operators	1,298,000	-5	-60,000	The increased use of automated manufacturing systems and growth of foreign competition are expected to cause overall employment to decline. However, the substitution of plastic for metal should create ample opportunities for plastic-working machine operators.
Numerical-control machine-tool operators	56,000	7	3,700	Despite the increased use of numerically controlled machine tools, employment is expected to increase more slowly than average because of growth of imports and increased operator productivity stemming from automation of machining shops.
Ophthalmic laboratory technicians	24,000	27	6,400	Increased demand for corrective lenses and fashionable glasses will contribute to faster than average growth. Most new jobs will be in retail optical chains. Very favorable job prospects are expected for persons with some experience in the field.

[1] Estimates are from the BLS industry-occupation matrix.

CLUSTER Subgroup Occupation	Estimated employment, 1986[1]	Percent change in employment, 1986-2000[1]	Numerical change in employment, 1986-2000[1]	Employment prospects
Painting and coating machine operators	100,000	1	1,400	Little change in employment is expected. Manufacturing employment is projected to decline due to the increasing automation of the application of paints and coatings; this decline will offset growth of employment in automotive body repair and paint shops.
Photographic process workers	56,000	29	16,000	Faster than average employment growth is expected due to increased interest in photography and the expansion of minilabs.
Precision assemblers	351,000	-1	-2,700	Despite increasing manufacturing activity, little change in employment is projected because factories will be more automated and more products will be assembled overseas.
Printing press operators	222,000	18	40,000	Expansion in the printing and publishing industry should contribute to average employment growth. Job prospects will be best for experienced workers. Apprenticeship or other training is likely to be required.
Shoe and leatherworkers and repairers	35,000	-17	-5,900	Growth of imports will lead to further declines in leatherworking jobs. Most openings will be in shoe repair where relatively low pay and unattractive working conditions curtail the supply of qualified applicants and in custom and orthopedic shoe manufacturing.
Stationary engineers	41,000	5	1,900	Slower than average growth is expected. Because of the complexity of the newer equipment, job opportunities will be best for those with technical school or apprenticeship training.
Textile machinery operators	309,000	-22	-67,000	Growth of imports and greater use of automated equipment are expected to result in employment declines.

[1] Estimates are from the BLS industry-occupation matrix.

CLUSTER Subgroup Occupation	Estimated employment, 1986[1]	Percent change in employment, 1986-2000[1]	Numerical change in employment, 1986-2000[1]	Employment prospects
Tool-and-die makers	160,000	5	8,300	Employment is expected to increase more slowly than average because of the slow growth anticipated in many manufacturing industries. However, due to the lengthy training required, shortages will exist in some areas, and those with appropriate skills and background should have good job prospects.
Upholsterers	74,000	10	7,600	Employment is expected to increase more slowly than average because consumers increasingly replace worn furniture rather than reupholster it.
Water and wastewater treatment plant operators	74,000	15	11,000	Employment is expected to grow as fast as average as new treatment plants are built and existing ones are expanded to meet the needs of a growing population and economy.
Welders, cutters, and welding machine operators	414,000	1	4,600	Little change is expected in overall employment. Advances in robotics and in visual and other machine-sensing capabilities will lead to a decline in the employment of welding machine operators. However, skilled welders with a knowledge of up-to-date welding techniques and materials should have good job prospects, despite slower than average employment growth.
Woodworking occupations	351,000	12	42,000	The substitution of other materials, growth of imports, and improvement of machinery will result in slower than average employment growth.
TRANSPORTATION AND MATERIAL MOVING OCCUPATIONS				
Aircraft pilots	76,000	29	22,000	Due to an expected shortage, the job outlook will be favorable in coming years. Faster than average employment growth and the large number of retirements expected will provide many job openings. Job prospects with major airlines are best for college graduates who have a commercial pilot's license or flight engineer's license and experience flying jet aircraft.
Busdrivers	478,000	16	77,000	Overall employment is expected to grow about as fast as average. Employers are expected to substitute part-time drivers for full-time ones. The number of student bus riders is expected to grow more slowly than average. Competition is anticipated for local and intercity bus-driver jobs due to the relatively high wages paid these workers.
Material moving equipment operators	998,000	-9	-93,000	Overall employment is expected to decline. The number of industrial truck and tractor operators is expected to drop significantly because of declines in industry employment and improvements in productivity. The employment of other material moving equipment operators is expected to grow slowly as industries that employ these workers, such as construction and State and local government, expand.
Truckdrivers	2,463,000	21	505,000	Average employment growth is expected due to increases in the amount of freight being shipped. Because earnings are relatively high and formal training is not required for this occupation, competition for jobs is likely.
HANDLERS, EQUIPMENT CLEANERS, HELPERS, AND LABORERS				
Construction trades helpers	519,000	13	68,000	Employment is expected to grow more slowly than average because of technological advances in the equipment these workers operate.

[1] Estimates are from the BLS industry-occupation matrix.

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